

HOW TO: INSTALL A CERAMIC TILE FLOOR

MATERIALS

- Ceramic Tile
- Cement Backer-Board Underlayment
- Cement Backer-Board Seam Tape
- Galvanized Screws
- Utility Knife
- Tile Edging
- Drill with Driver
- Transition Strips
- Tile Spacers
- Tile Cutter
- Glass Cutter
- Tile Nippers
- Notched Trowel
- Tile Adhesive
- Rubber Grout Float
- Grout
- Buckets-for mixing grout and cleaning tile
- Sponges
- Grout Sealer
- Rubber Mallet
- Level
- Floor Leveling Compound
- Sander and Sandpaper
- Square
- Tape Measure
- Pencil
- Chalk Line
- Work Gloves

IMPORTANT

Always use proper safety measures when doing any project. If you're not confident installing a ceramic tile floor, see a Lowe's associate, as Lowe's installs many types of flooring. And always follow local building codes. Before starting the project, read the manufacturer's instructions. You'll find information regarding moisture tests and types of subfloors. Virtually maintenance-free, ceramic tile flooring can add value to your home thanks to its durability and versatility. From fireplace hearths and entry-ways, to entire rooms inside your home and even patio rooms outside, there's a style available at Lowe's to suit every taste. Once you're ready to install, check out these easy steps.

PREPARATION

- **01** Determine how much ceramic tile and underlayment you will need for your project.
 - Use the square footage: multiply "length X width" of the room.
 - This number will determine how much underlayment, adhesive and grout you will need.
 - Add 5% to this number to determine how much ceramic tile you will need.
 - The extra 5% is for any variance or possible mistakes.
 - Or use the calculator at www.lowes.com/calculators.

02 Remove any baseboards and shoe molding.

03 Level the subfloor.

- Use a sander on high spots.
- Use a floor leveling compound on the low spots.

04 Install the underlayment.

- Attach cement backer-board to the subfloor with galvanized screws. If you have to cut the backer-board, score the material with a utility knife then snap the board along the cut-line.
- Cover any seams with cement backer-board seam tape.
- If the underlayment plus a tile does not fit under any door casing, cut the casing to fit. Also make any necessary adjustments to any doors.





PREPARATION (cont.)

Let's Build Something Together

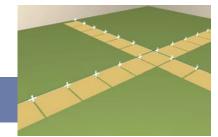
05 Draw reference lines for laying the tile.

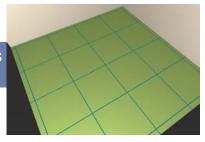
- Mark the center of two opposing walls.
- Snap a chalkline between these marks.
- Do the same thing for the other two walls, forming a cross in the middle of the room. These lines are the reference lines.
- Make sure the intersection is square.
- Loose lay the tile along each of the reference lines. Use tile spacers for a more accurate fitting. Maintain about 1/4" expansion gap between the perimeter tiles and walls.
- If the dry layout leaves less than half a tile's width at the walls, adjust the reference lines so there are equal tiles on each side.
- Pick up the tiles once the reference lines are set.
- If you're working in a large area, it may be helpful to mark a grid of 3' squares on the floor. It's easier to work in smaller sections so necessary adjustments can be made as you lay the tile.
- For an entry-way, a grid may not be needed. Lay the tile so the pattern appears visually pleasing. Adjust the layout so full tiles are near the center of the room and cut tiles are against the wall.
- **06** Spread the adhesive with the smooth side of the trowel. Make sure it covers the area evenly and does not cover your reference lines.
 - Once the adhesive is down, comb over it with the notched side of the trowel at a 45° angle.
 - Comb over the adhesive in one direction, not a swirl pattern.
 - Remove any excess with the trowel.
 - If you are working on an entry-way, spread the adhesive along the edges and slide tile edging into the mastic. The adhesive will hold the metal edging strips.

LAYING THE TILE

- **01** Working along the reference lines, set the tile in place. It's a good idea to mix tile from different boxes to account for any slight difference in color between packages.
 - Lightly press and twist the ceramic when setting to make sure the adhesive sticks. Don't push so hard that the adhesive is forced out from under the ceramic.
 - Periodically, lift a tile square to make sure the adhesive is sticking. If it isn't adhering to the tile, "butter-back" the adhesive on the tile or use a larger notched trowel to comb the adhesive.
 - If any of the adhesive gets on the tile face, wipe clean with a wet sponge.
 - Use spacers to separate the tiles.

02 Once a row is in place, level the tile with a rubber mallet and level.













INSTALL A CERAMIC TILE FLOOR

LAYING THE TILE (cont.)

03 Keep working along the reference lines in each section of your work area.

04 Cut tile as needed. WEAR SAFETY GLASSES AND GLOVES!

- Straight cuts: use a tile cutter. Straight cut tile will lie against the wall.
 - 1. Place a tile square on top of the last laid piece, with the edge against the wall.
 - 2. Slide the tile away from the wall to maintain the expansion gap.
 - 3. Place another tile on top of that piece, keeping the edges flush with the bottom piece.
 - 4. Use the edge of the top piece to mark a line on the middle piece.
 - 5. Cut along this line on the middle piece.
- Curved cut-outs: score the area with a glass cutter, then remove the cut-out with tile nippers.

05 Once all the tile has been set, remove the spacers and let the adhesive dry overnight.

06 Grouting

- Mix the grout according to the manufacturer's instructions. Usually this yields a paste-like consistency.
- With a rubber float, apply the grout diagonally across the joints.
 - 1. Remove as much excess grout from the tile surface as possible.
 - 2. After twenty minutes, wipe along the grout lines with a damp sponge. The grout should sit just below the tile surface.
- Follow the manufacturer's instructions for grout curing time.

07 Finishing Touches

- Once the grout has cured, apply a grout sealer to the joints.
- Attach any baseboards and transition strips.

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